THE CALIFORNIA VETERINARIAN

THE CALIFORNIA STATE VETERINARY MEDICAL ASSOCIATION

MID-WINTER CONVENTION

JANUARY 25, 26, 27, 1954
DAVIS, CALIFORNIA

SEPTEMBER - OCTOBER
1953

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Calo endeavors to safeguard its long and favorable relationship with the Veterinary Profession; treasuring many friendships that were born over a quarter of a century ago.

Calo neither manufactures nor recommends any type of remedy for pets, knowing that this field is well covered by trained Veterinary Specialists.

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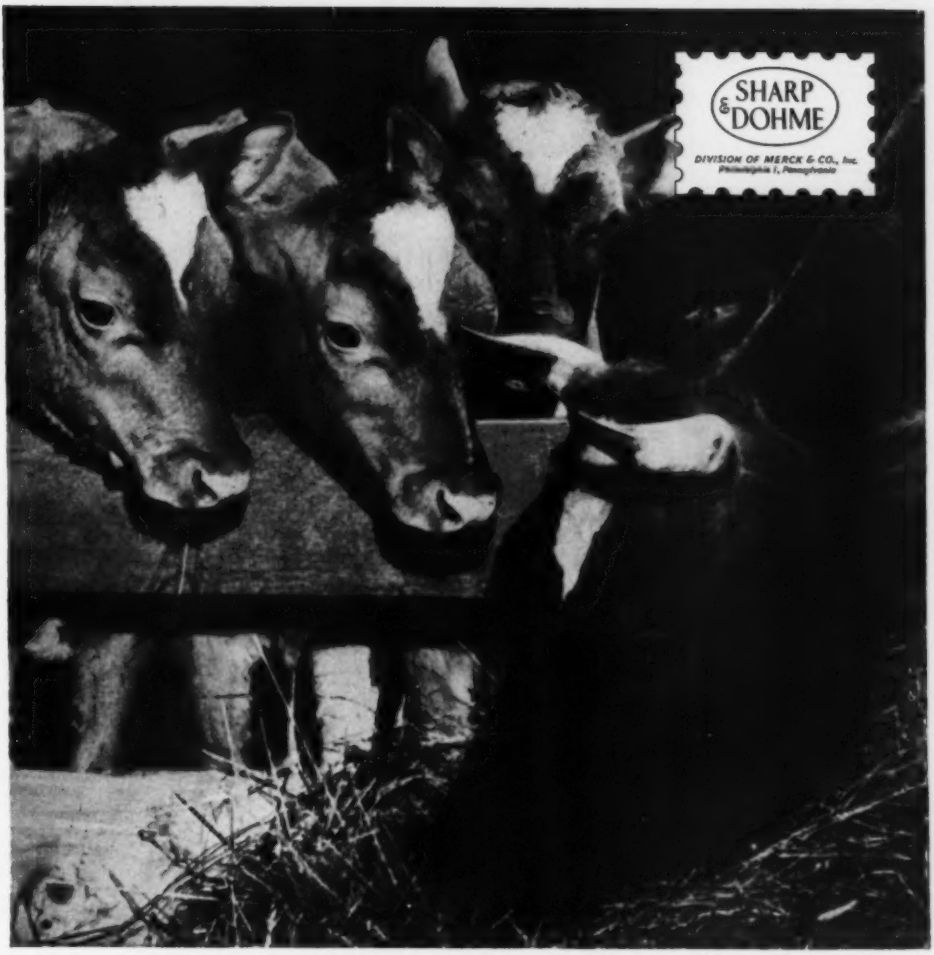

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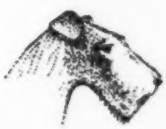

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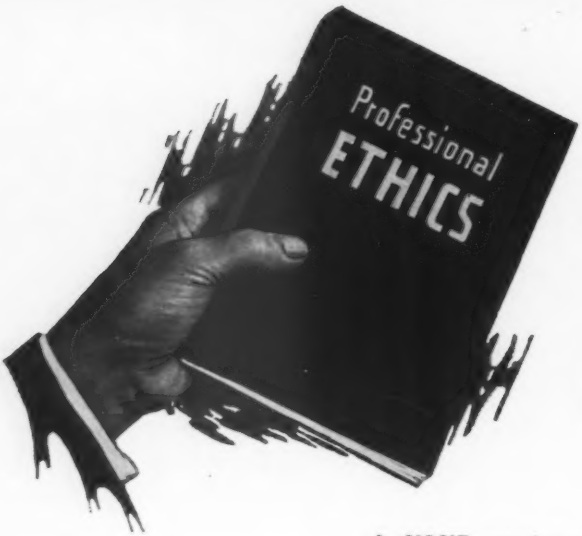

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THE CALIFORNIA VETERINARIAN

SEPTEMBER-OCTOBER, 1953

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Volume 7 — **Number 1**

Published Bi-Monthly by the California State Veterinary Medical Association, 3004 16th Street, San Francisco 3, California. Devoted to promote Veterinary Science, to increase the esteem of the general public for the veterinarian, to protect his rights and privileges and to elevate the standard of the profession generally in scientific intercourse. Address all communications to The California State Veterinary Medical Association, Charles S. Travers, Executive Secretary. Please notify us immediately of incorrect address or change of address.

Unsolicited manuscripts are at sender's risk, and when received will not be returned unless accompanied by return postage. The Association is not responsible for views of contributors and we reserve the right to edit and condense articles. Advertising rates will be furnished upon request.

Report of the Annual Meeting, CSVMA Women's Auxiliary

The 23d Annual Meeting of the Women's Auxiliary to the CSVMA was held at the Lafayette Hotel, Long Beach, June 22-24, 1953, with eighty ladies in attendance.

Mrs. T. J. Hage of Davis, President, presided over the business meeting held at the Victor Hugo Restaurant. She expressed appreciation to the committee for all of their efforts in making the enjoyable social program possible.

The members voted to continue annual donations of $25 to the AVMA Auxiliary Student Loan Fund; $15 to the AVMA Research Program, and $5 to the Medical Research Association of California. Five $200 student loans were granted to graduating students of the School of Veterinary Medicine at Davis.

A most favorable membership report was given by Mrs. C. D. Stafford, Novato, Vice-President. Since June, 1952, we gained 100 members. (This number was further increased during our convention to a record-breaking 247.)

Donations to the Auxiliary loan fund were received and reports were given from the following local auxiliaries:

1. Alameda-Contra Costa Counties, by Mrs. B. H. Dean, President, who presented $100 in memory of Mrs. E. V. Edmonds. Mrs. Edmonds was President of the CSVMA Auxiliary in 1950-51.
2. Central California, by Mrs. E. R. Braun, Hanford, $25.
3. Redwood Empire, which is not an organized auxiliary, gave $50, presented by Mrs. Stafford.
4. Sacramento Valley, by Mrs. P. D. DeLay of Sacramento, $100.
5. Southern California, by Mrs. C. H. Ozanian of Bellflower, $50.
6. San Diego County, by Mrs. Philip Haims of San Diego, $25.
7. Donation received from Bay Counties.

The following officers were elected for the ensuing year: President, Mrs. Charles D. Stafford, Novato; First Vice-President, Mrs. Thomas B. Eville, Fresno; Second Vice-President, Mrs. Charles E. Irvin, Yucaipa; Secretary-Treasurer, Mrs. John C. O'Brien, Sebastopol.

The meeting was then adjourned. A delicious luncheon followed, after which Melinda Kay gave a demonstration of hats. She presented, in appropriate costume, hats of all vintage some of which dated back to President Lincoln's inauguration. The Wilton Hotel was the scene of the banquet and dance. Planned entertainment was concluded on Wednesday with a trip to Knott's Berry Farm and Ghost Town.

MRS. T. B. EVILLE,
Retiring Secretary.

President's Message

DR. PAUL D. DE LAY

Membership in the California Veterinary Medical Association has increased by approximately 250 members during the past three years. There has also been a marked increase in the population of the state and a corresponding expansion within the livestock industry.

The causes of several disease entities not previously encountered have within the past few years been established. Many other infections are not adequately controlled and offer challenge to the veterinary profession. All of these factors tend to increase the responsibility of the veterinary profession. In accepting this responsibility, the veterinarian must not only serve, but advise, cooperate and lead. The recent growth of the Association indicates that the profession is prepared through individual and group action to meet the ever-changing complexities encountered in the field of disease control.

Through strong associations, both state and local, the veterinarian is provided with a medium through which he can cooperate with livestock organizations, the allied professions, and representatives of small animal groups to solve common problems. The veterinarian in turn may also benefit by the social and educational opportunities offered through state and local associations.

It was most gratifying to note at the Long Beach meeting the interest on the part of local association representatives in the state association problems, and I very much appreciate the wholehearted cooperation of those members who have offered to serve on committees during the year 1953-54.

I wish to take this opportunity to sincerely thank all members of our association for the honor and distinction which you have conferred on me. As president, I shall do my utmost to fulfill your confidence in me.

PAUL D. DE LAY, D.V.M.

NOT FOR ANIMALS, ONLY!

W. S. GOCHENOUR*

Mr. Chairman, Fellow Veterinarians, Ladies and Gentlemen of the Radio Audience:

It is a particular challenge to me to try to interpret this meeting of the California State Veterinary Medical Association, and the veterinary profession to the public at large. I've been trying to interpret my job to my non-veterinarian friends for many years, but I guess we veterinarians will always be open to question when we talk about sitting up all night with a sick animal.

But, I have been gratified to find the amount of interest shown by my non-veterinarian friends when I explain the too-often, little-realized interrelationship between animal medicine and human medicine—and the contributions the veterinary profession has made to the health and well-being of the general public.

So, it is a particular pleasure for me to be addressing you of the radio audience from this meeting today—because meetings such as this do provide a service to the public as well as to the profession. The veterinarians gathered here today discuss and are interested—not only in diseases which attack animals alone—but also in those animal diseases transmissable to man—diseases which may attack man's family, may affect his food, or may attack his livestock and household pets.

The veterinary profession's activities affect the entire nation, the entire world. Every individual who eats food benefits from the wide scope of our professional knowledge and research. No farm, however remote, is completely independent of our services—or totally unaware of our activities. Very few pet owners today fail to call for our professional advice or treatment somewhere along the line in the care and protection of man's best friend or other household animals.

We veterinarians . . . as other professional people . . . are conscientious about our responsibilities and naturally proud of our accomplishments. So, for a few minutes, I would like to tell you of the listening audience about our organizations, our work and our plans.

Our interests are international in nature. We of the profession gather and exchange information concerning the health problems of animals *and humans* from the world at large. This group meeting today . . . the California State Veterinary Medical Association . . . represents only one of 48 state associations within our own country. Our national organization—which includes Canada and Mexico as well as the United States—the American Veterinary Medical Association—will meet in Toronto, Canada, in July. Then, this summer, the International Veterinary Congress will meet in Stockholm, Sweden, where veterinary medicine, as it applies to the world in general, will be discussed. There, amid the comparative calm and reserve of the Swedish culture, knowledge brought from all nations will be shared, discussed and transmitted—for the world-wide safeguarding of livestock, pets and mankind.

Through these meetings . . . through articles published in newspapers, and in the professional journals . . . through radio . . . and now television . . . we are able to acquaint the general public with our activities.

One of our major activities is safeguarding our own country against imported diseases—and this is no small project today. As international transportation is facilitated . . . and as international trade expands . . . it becomes more and more important to be fully acquainted with animal diseases all over the world. Understanding the nature and cause of these diseases and the means by which they are spread is one of the American veterinarian's responsibilities,—so that appropriate barriers may be set up to prevent, insofar as possible, entrance of these diseases into the United States. Should a foreign disease circumvent such barriers, it is the responsibility of the veterinary profession to recognize that newly introduced disease *promptly*, and to take whatever steps are necessary to stamp it out.

Before World War II made globe-girdling by air a commonplace, veterinarians had only to inspect every ship landing at our docks to build a barrier against foreign-animal diseases. Now, with constantly-arriving oceanic planes, our veterinarians must be even more on the alert. The veterinarian must gain an intimate knowledge of the diseases of every continent—for even a single insect, surviving a speedy trip through the international clouds by plane, may carry a new and devastating disease to America's domestic animals in the home as well as on the farm and ranch.

This new danger is one added reason why every owner of a pet or of livestock should take advantage of the presence and knowledge of his veterinarian—to insure safeguarding against the chance introduction of a foreign disease which might, unless detected early, wipe out the entire animal population of any community or rural area.

It is universally conceded that we in the United States are fortunate, in that our country is comparatively free from dread animal plagues common to other lands—because of the vigilance of the American veterinary profession. But at this point, let me sound an

*Presented at the opening session of the annual meeting of the CSVMA and broadcast over radio station KGER.

"alert" for every owner of an animal everywhere: To keep our animals safe—joint co-operation of the public *and* the profession is essential—it is our greatest safeguard against animal disease.

Another responsibility of the veterinarian—which I mentioned before, but cannot be too strongly stressed—is the safeguarding of food. Because of specialized scientific training in bacteriology, parasitism, and sanitation—and because of the quick recognition of even slight evidences of disease in animal carcasses— veterinarians have been given the grave responsibility of safeguarding America—and, incidentally our armed forces overseas, from the danger of unfit food. The basis of a wholesome and adequate food supply is always a healthy, prosperous livestock industry! Along the same line, and even more obvious, is the inspection of America's milk supply — conducted, of course, by American veterinarians.

And here, let me add a word about the large and important group of veterinarians who devote the major part of their time to the ailments of pet animals. It is well known that our pets and livestock are subject to many ailments—both infectious and non-infectious—as well as to injuries and deforming diseases which require surgery. Our practitioners treat their patients, large and small, with all the skill and knowledge that is known to modern medicine—and in the small animal field, too, the veterinarian's ingenuity aids human health. For instance, did you know that the metallic splints which have so speeded up the recovery from broken bones in human surgery were first used by a veterinarian in treating the broken bones of dogs? Actually, the veterinary profession has much in common with the human medical profession. What is learned in one may ofttimes be applied to the other.

This intercommunication of professional knowledge between the animal physician and the human physician is one of our least publicized but greatest responsibilities. Few persons not engaged in the livestock business realize the number, variety and seriousness of the diseases and parasitic ailments that attack domestic animals and are transmissible to man.

As a pertinent example of co-operation between veterinarians and physicians in controlling such diseases, tuberculosis of cattle was for centuries a primary cause of tuberculosis in man. The veterinary profession attacked and suppressed tuberculosis of cattle. As a result, Dr. J. Arthur Myers, who is a physician serving as chairman of the committee on tuberculosis, Minnesota State Medical Association, said, "The veterinarians' program pointed the way for the control of tuberculosis in man . . . These achievements constitute man's greatest victory over tuberculosis." And we in the veterinary profession know that our chief thought in controlling tuberculosis among cattle was the prevention of the spread of bovine tuberculosis in man. Thus, not only did veterinarians give the original impetus to organized world-wide tuberculosis control, but they pioneered many advances in the scientific attack on the disease.

Another example of the veterinary profession's contribution to our well-being concerns the transmission of diseases by insects. Down through the years veterinarians have found certain infectious diseases of animals to be transmissible by insects. Such findings have frequently prompted the thought that certain diseases of man might be transmissible by insects. For example this was found to be the case in yellow fever, typhus, and African sleeping sickness. These diseases in both animals and human beings have been suppressed by the control of the responsible insect. It is well-known that the construction of the Panama Canal was brought to a halt by the devastating effects of yellow fever. Construction crews sickened with the fever as fast as they could be hired. Through the effective control of the mosquito, yellow fever was controlled, construction was resumed and the Canal completed. None of this would have been possible had not veterinarians discovered that insects can transmit disease.

Today, the great Panama Canal, bulwark of America's defenses and shortcut to the commerce of the world, stands as a lasting monument to the veterinary profession. This has remarkable social as well as medical implications—for through this discovery of the veterinary profession, the way was lighted for the well co-ordinated sanitary work which has made this once-dreaded scourge a rarity among mankind.

Small but treacherous parasites, too, were caught under the veterinarian's microscope. This came about through our work on control of hookworm disease. It was the Bureau of Animal Industry, founded and directed by veterinarians, which first announced that this disease was caused by a parasite—the hookworm — common to both animals and man. Subsequently, methods of treating parasitic diseases of animals were found applicable to the treatment of parasitic diseases of man.

But we have not been alert only to man's diseases attributable to other living creatures. Of special interest is the case history of silicosis, a disease caused by inhaling dust. This disease is so common in some occupations that its treatment has become a medical specialty. Yet, centuries before physicians gave serious thought to silicosis, early Roman and Arabian veterinarians had recognized the ill effects of inhaling sandy dust stirred up by horses on desert marches.

Virus diseases are frequently in the news these days. Here, too, the veterinarian has provided important contributions. Findings on virus diseases of animals—and the development of virus vaccines for these diseases—

have paved the way for similar studies in the treatment of virus diseases of man. Out of these studies have developed virus vaccines for preventive medicine in humans, such as influenza vaccine, yellow fever vaccine, and the recently announced experimental vaccines for polio.

Yes—the veterinarian is constantly on the alert.

As recently as a few days ago, word came from Mexico that foot and mouth disease has attacked there again.

It is a vicious disease. It can result in whole countrysides of emaciated cows. It can result in a vast loss to the national economy. But each time the disease has threatened our borders, the American veterinary profession has been alert—as it is now. And again, through quick action and professional knowledge, the best possible barriers against entry of this disease into our country have been set up by the United States Bureau of Animal Industry. Veterinarians in our border states, including your own California, are, even as I now speak to you, engaged in this work. And, by application of these eradication measures, foot and mouth disease will again be kept from spreading across the border and attacking our livestock.

Another livestock disease — tick f e v e r — which, if it had not been checked, could have cost our American economy and our cattle raisers more than fifty million dollars annually—has been wiped out in this country by the veterinary profession. It was a veterinarian, Cooper Curtice, who began the studies which proved that this malady was transmitted by the cattle tick. And—as a result of these studies—the way was opened for conquest of all insect-borne diseases of animals and man, including the previously mentioned control of yellow fever.

The record shows that the veterinary profession has made noteworthy contributions to public health and to eradication and suppression of infectious diseases. However, eradication of *all* infectious diseases has not yet been possible. Through study, and through application of knowledge gained, progress is being made steadily and rapidly. Among the important diseases which are being effectively suppressed and, hopefully, that are in the process of elimination are rabies, tuberculosis, brucellosis, anthrax, swine erysipelas, hog cholera, and other diseases of animals.

Now, I do hope that, if I have established no other point here today, you in the listening audience will realize that the veterinary profession is *not* for animals only. It is closely related to human medical science and has contributed vastly to the well-being of every man, woman and child in the world today. We veterinarians are conscientious a b o u t and proud of our profession, and we are not resting on our laurels. Our eyes are turned toward the future. It is extremely encouraging for us old-timers to know that since the beginning of World War II, new veterinary schools have been established in seven states including California. These schools are helping to relieve the shortage of veterinarians. It is estimated that the 17 veterinary schools in the United States will yearly add to the ranks of the profession one thousand recruits trained in modern veterinary medicine. This will more than offset the losses of the profession by normal attrition due to deaths and retirements. These additions to the ranks will insure continuation of the status of the United States as the best place in the world in which to raise livestock and to maintain pet animals—and will insure the continuation of veterinary research and of the veterinary profession's contribution to the health and well-being of mankind.

New Vehicle for Wound Treatment

Goshen Laboratories have called our attention to Solprogel, a product of Soluble Products Co., which has been found to be a suitable vehicle for application of antibiotics and chemotherapeutic agents. An unsuitable vehicle can inhibit the action of the agent, or react with it, or act as a culture medium, or in other ways prevent most favorable results. Solprogel is a white granular substance which gives the desired consistency when mixed with water. It is sterile, not a culture medium, does not interfere with wound healing processes, and does not react with the chemotherapeutic agents thus far tested, or interfere with their activity.

Advice to Farmers

Squibb has begun an interesting new series of ads (see *Farm Journal* or *Successful Farming*). The theme is "it takes all three," good management, good veterinary service, and good drugs. From a veterinarian's point of view, this is sound advertising. Even with the best modern knowledge we cannot do our job well when our clients don't do theirs, nor could we operate successfully without reliable biologics and pharmaceuticals. We are glad to see advertisements of common sense, in good taste, and attractive to the eye.

Applicants

Harry H. Page, Yreka. Vouchers: J. F. Chastain, James G. Rice.

E. R. Holland, Fortuna. Vouchers: W. H. Rockey, R. P. Gobler.

Texas Veterinary Medical Association Annual Meeting. Hotel Galvez, Galveston, Texas, January 24-26, 1954. Dr. Henry Fisherman, Chairman, 1711 Telephone Road, Houston; Dr. Alvin A. Price, Executive Secretary, College Station.

INTERVERTEBRAL DISC PROTRUSIONS IN THE DOG*

B. F. HOERLEIN, D.V.M., Ph.D.

The term *disc protrusions* is an all inclusive statement for (1) herniation of the nucleus without rupture of the annulus; (2) rupture of the annulus with an extrusion of the nucleus; (3) edema of the disc; and (4) rupture of the annulus and projection of the nucleus out under the dorsal longitudinal ligament.

The *incidence* of clinical disc protrusions in dogs is about 0.7 per cent. The incidence of abnormal discs in clinically normal dogs as determined in 130 autopsy dogs was 41.5 per cent. Eighty-seven per cent of these positive dogs (autopsy survey) were over five years of age.

The most prevalent *age* of clinical protrusion cases was three years. The percentage incidence was determined to be: Cocker Spaniel, 2 per cent; Dachshund, 8.3 per cent, and Beagle, 1.8 per cent. Both sexes were affected with about equal frequency. It was concluded that any breed can be affected, however, the condition is more frequently seen in the Dachshund, Cocker Spaniel, Pekingese, and Beagle.

The *location* of the disc protrusions is usually cervical, at the thoraco-lumbar vertebral junction, or the lumbar intervertebral discs. The most frequent location is the 13T-1L disc. The mid-thoracic discs are rarely affected, largely because of the substantial ligamentum conjugale costarum which runs between the heads of the ribs and in the dorsal part of the annulus fibrosus.

The *clinical manifestations* of disc protrusions are (1) pain; (2) paresis and/or incoordination; (3) paraplegia; and (4) an acute progressive fatal paralysis.

The *pain* may be local or referred. The animal is unwilling to move, jump, climb stairs, and may cry or whine for no apparent reason. In *paresis* and/or *incoordination* the animal may show an incoordination of the part affected, curling under and scuffing of the toes or paw, and general weakness. *Paraplegia* may be spastic or flaccid. Spastic paraplegia may be associated with pain; the tendon reflexes are exaggerated, urine and feces are retained, and hind legs are carried under the body. In flaccid paraplegia there is usually little pain, tendon reflexes are hypoesthetic, little muscle tone, legs are dragged behind the body, and incontinence of urine and feces is usually seen.

The *positive diagnosis* of the condition is made by the results of contrast spinograms (lateral and DV views) as correlated to the findings of a neurological examination. If the normal spinogram is negative in a recent noncalcified lesion, contrast myelography is used. Pantopaque, the recommended contrast medium, is relatively nontoxic clinically but may produce a chronic leptomeningitis microscopically. This medium should be given in the subarachnoid space, most accessible at the atlanto-occipital interspace. Neurological examinations are helpful in establishing a diagnosis, and pain over a specific disc aids in the location of the pathological lesion. Laboratory tests are only of value as an aid in eliminating other conditions.

The methods of treatment are grouped into the conservative and surgical categories. The conservative method consists of rest and symptomatic drug therapy. Surgery includes the dorsal laminectomy, hemilaminectomy, and the disc fenestration or curettage. Such drugs as B complex vitamins (especially thiamin), calcium, thyroid extract, salicylates, cincophens, physostigmine, and antispasmotics are of value. Probably of more or at least equal importance are good nursing procedures, such as maintaining urine and fecal excretions, physiotherapy, support for hind legs by slings or casts, high nutritive diet, and the prevention of secondary infections.

The *dorsal laminectomy* is the most radical surgery and consists of the exposure of the dorsum of the cord by a removal of the dorsal bony lamina. The cord is retracted and correction is made. This surgical procedure is rarely used in small animal surgery.

The *hemilaminectomy* consists of a lateral exposure of the spinal cord by removal of the articular process, trephination into the canal or removal of the lateral bony lamina, and correction of the disc protrusion. This is not so radical as the dorsal laminectomy and can be effectively combined with the disc fenestration.

The *disc fenestration* or *curettage* consists of lateral puncture and removal of the disc without invading the spinal canal. It is designed to decrease pressure exerted on the cord by the disc protrusion and to stabilize the injury to preclude recurrence. This is the least radical of the three surgical procedures described, and should be combined with the hemilaminectomy in older and recurrent lesions.

Conservative treatment can be considered in:

1. Most pain conditions
2. Acute progressive myelitis
3. Dog showing normal reflexes, can support weight, with normal urine and bowel function.

(Continued on page 32)

*Abstract of paper given at California State Veterinary Medical Association convention, Long Beach, California, June 22, 23, 24 1953.

DISTEMPER VACCINE IMMUNIZATION

GEORGE R. BURCH, D.V.M.,† *New Augusta, Indiana*

The protection of susceptible puppies from bacterial and/or viral infections is of prime importance in canine research. At this Research Farm, the mortality rate among unimmunized puppies from the distemper complex is very high. This high mortality is due to the usual presence of dogs in the unit that have symptoms of the distemper complex (hard-pad disease, convulsions, pneumonia, infectious hepatitis).

Since preliminary studies here with Virogen* had indicated this vaccine could be successfully used to protect puppies intended for long term projects against this disease complex, it was decided to instigate a controlled immunization program to obtain information concerning its protective ability.

Procedure

Four litters of puppies were raised in another building separate from the canine research unit. Each litter was divided into vaccinates and controls. Virogen injections, ½ to 2 cc., were initiated when the pups were approximately five weeks old, and were repeated at two-week intervals, until the animals had reached four months of age. Volume of the injection was gradually increased as the animals gained in weight. At the age of four months, the pups received three 5-cc. injections. The first two 5-cc. injections were at two-week intervals, and the third 5-cc. injection was given one to two months after the second. Contact exposure to disease was accomplished by placing the litters in a unit where the distemper complex was known to exist. The surviving animals were again exposed 9-11 months after initiation of the vaccine prophylaxis, by re-introducing them to the unit. In addition, each animal was inoculated with 2 cc. of tissue suspension containing the virulent virus of Carré.

Comment

As recorded in Table I, 12 of 14 vaccinates survived the diseases that resulted in the death of all the 10 control pups. Thus, this study substantiates previous observations that the vaccine can be used to protect puppies against the distemper complex. Seven of the dogs which succumbed showed histopathological evidence of infectious hepatitis inclusion bodies. In two of these seven pups, distemper inclusion bodies were also present. These

†Pitman-Moore Research Farm, New Augusta, Ind.
*Trademark, Pitman-Moore Co., Indianapolis.

FIGURE 1—Control Pup, Litter III

FIGURE 3—Control Pup, Litter IV

FIGURE 2—Vaccinate Pup, Litter III

FIGURE 4—Vaccinate Pups, Litter IV

seven puppies died very suddenly. Autopsy revealed serous hemorrhagic fluid in the abdominal cavity, friable livers, edematous gall bladders, and hemorrhages on the lungs. The deaths occurred eleven to twenty-three days, after exposure in the distemper unit. Since only one vaccinated pup died from infectious hepatitis as compared with six controls, it suggests that Virogen immunization may confer some degree of protection against this disease. It should be pointed out, however, that the volume of Virogen used, was much greater than the dose of infectious hepatitis vaccine required to protect susceptible dogs (1 cc. I.H. Vaccine* intradermally). Figures 1 and 2 show a control and vaccinate from Litter No. 3. It is noted that the control pup is obviously sick with distemper-like symptoms—yet on autopsy, the tissues do not show any histopathologic evidence of inclusion bodies. The control pup in Litter No. 4, which succumbed, showed severe convulsions prior to death (Fig. 3). The two vaccinates of this litter (Fig. 4) remained normal throughout the experiment, even though they were kept in the same pen with the convulsive controls. The tissues from the control puppies failed to reveal evidence of inclusion bodies. It is possible that the early deaths from hepatitis accounts for the low incidence of distemper inclusion bodies observed in this study. It has been noted that typical clinical distemper symptoms in susceptible puppies have occurred approximately 30 days after entry into the unit.

Immunization procedure used in this study was arbitrarily decided upon from the standpoint of practicability and convenience. The amounts of vaccine used depended basically upon the size of the puppy. This study indicates that Virogen prophylaxis can be radically varied from the standard routine (three

(Continued on page 31)

*Trademark. Pitman-Moore Co., Indianapolis.

TABLE I

Results in Four Litters Used in Controlled Vaccine Experiment

Litter	*Inoculation Procedure*	*Observations Noted, Dating From First Injection*	*Histo-Pathological Findings*
No. 1			
4 vaccinates	Initial Injection 2 cc. Virogen	64th Day: Control pup showing nasal and ocular discharge.	
3 Controls	Total Vaccine administered per animal 35 cc.	78th Day: Vaccinated pup died.	No evidence of inclusion of bodies of I.H.* or C.D.** Cause of death unknown.
		99th Day: Six pups exposed to the distemper complex.	
		109th Day: Control pup died.	Inclusion bodies of I.H. and C.D.
		111th Day: Control pup died.	Inclusion bodies of I.H. and C.D.
		113th Day: Control pup died.	No evidence of inclusion bodies. Cause of death unknown.
		339th Day: Three pups re-exposed and inoculated with virus of Carré.	
		Survival Rate 3 of 4 Vaccinates 0 of 3 Controls	
No. 2			
5 Vaccinates	Initial Injection ½ cc. Virogen	53rd Day: Eight pups exposed to the distemper complex.	
3 Controls	Total Vaccine administered per animal 31 cc.	70th Day: Vaccinated pup died.	Inclusion bodies of I.H.
		71st Day: Control pup died.	Inclusion bodies of I.H.
		76th Day: Control pup died.	Inclusion bodies of I.H.
		77th Day: Control pup died.	Inclusion bodies of I.H.
		294th Day: Four pups re-exposed and inoculated with virus of Carré.	
		Survival Rate 4 of 5 Vaccinates 0 of 3 Controls	
No. 3			
3 Vaccinates	Initial Injection ½ cc. Virogen	126th Day: Five pups exposed to the distemper complex.	
2 Controls	Total Vaccine administered per animal 21.5 cc.	140th Day: Control pup died.	Inclusion bodies of I.H.
		151st Day: Control pup died.	No evidence of inclusion bodies Cause of death unknown.
		312th Day: Three pups re-exposed and inoculated with virus of Carré.	
		Survival Rate 3 of 3 Vaccinates 0 of 2 Controls	
No. 4			
2 Vaccinates	Initial Injection 1 cc. Virogen	62nd Day: Control pup died.	No evidence of inclusion bodies. Cause of death unknown.
2 Controls	Total Vaccine administered per animal 31 cc.	71st Day: Control pup died.	No evidence of inclusion bodies. Cause of death unknown.
		119th Day: Two pups exposed to the distemper complex.	
		268th Day: Two vaccinates re-exposed and inoculated with virus of Carré.	
		Survival Rate 2 of 2 Vaccinates 0 of 2 Controls	

*Infectious Hepatitis.
**Canine Distemper.

Surital Sodium Anesthesia in Dogs and Cats: A Symposium Covering 7522 Patients

F. E. EADS, D.V.M., M.S., *Detroit, Mich.*

Although intravenous anesthesia is one of the oldest means of rendering patients insensible to pain, the method has been actively studied only within the past 15 years. So far as is known, the earliest attempt to produce anesthesia by vein was made in 1665 when a solution of opium was given by means of a very crude hypodermic needle. For many years thereafter, intravenous anesthesia received only sporadic attention.

With the synthesis of barbiturates came renewed interest in intravenous anesthesia. One of the first barbiturates to be used intravenously was sodium amytal in 1929.

The search for more satisfactory anesthetic agents for intravenous use continued and ultimately resulted in development of a series of short-acting compounds referred to as thiobarbiturates. Surital sodium* is the most recently introduced member of this group.

Although short-acting barbiturates have certain characteristics in common and are closely related chemically, they differ to a marked degree in specific properties. Of special interest is the ability of various compounds to potentiate certain reflexes, especially laryngeal reflex, and depress those which control respiration and circulation. Obviously, any agent which has a lessened tendency toward production of laryngospasm, hypotension, and depression of respiration possesses properties desired by the veterinarian. The degree to which surital affects such reflexes accounts for its spontaneous recognition as an excellent intravenous anesthetic for dogs and cats.

The search for new anesthetic agents constantly continues. No intravenous anesthetic in common use today has adequately met the rigid requirements of an ideal anesthetic. Surital sodium, however, approaches the ideal and the purpose of this paper is to report on the combined data related to its use compiled by some 72 practicing veterinarians.

Pharmacologic Action

Numerous investigators have studied the pharmacologic action of surital sodium.[1-16] These studies revealed that surital is an anesthetic of extremely low toxicity,[5,7,8] of rapid action,[3,5,7,9] of few undesirable side actions,[1,3,4,5,7,10] and is applicable over a wide range of anesthetic risks.[3,4,5,7] As with all barbituric acid compounds, respiratory rates were decreased but respirations, in most instances, were deep and regular and averaged 8 to 14 per minute.[1] Pulse rates were also slightly depressed in rate but were increased in force and amplitude. After apnea, the heartbeat continued for an average of five minutes unless respiration could be started again.[5]

Wyngaarden, et al. and Spencer and Coakley[13] found that surital sodium produces an equally smooth and perhaps more rapid induction of anesthesia than pentothal, with fewer signs of excitement and more rapid recovery. They estimate that the potency is approximately 1.5 times that of pentothal in the dog. Similar results were obtained by Kelly, et al.[14] Surital accumulates more slowly in dogs than does pentothal so that there appears to be less saturation of the detoxification mechanisms when this agent is employed.[9]

Surital sodium when used alone markedly stimulates the flow of saliva, but when it is combined with curare or is administered following premedication with atropine, this reaction is practically eliminated.[11]

No damage to liver or to kidneys has been noted in dogs receiving from 1 to 18 injections given either on consecutive or on alternate days over periods of from 1 to 49 days.[1] Borgman[5] observed no evidence of accumulation or of increased tolerance in two dogs anesthetized daily for 11 days.

In a study to determine toxicity of surital, Borgman[5] found that a few dogs were able to survive 2.5 times the anesthetic dose of surital without stimulation but the margin of safety appeared to be less than a 1.75 dose. These results have been confirmed by Ezell.[6]

No local reactions have been encountered at the site of injection. However, surital, like other barbiturate solutions, is irritating if accidentally injected into the tissues surrounding a vein.

Solutions of surital should be used within one week after dilution since absorption of CO_2 from the air brings about lowering of the pH of the solution which causes precipitation of the salt.

It is preferable that the aqueous solvent employed for making surital solution (as with other barbiturates and thiobarbiturates) should not contain any substance such as phenol, dextrose, or buffer agents, since any of these may tend to cause precipitation. Injection of air from syringe into solution should also be avoided since this may hasten development of cloudiness.

*Product of Parke, Davis & Co., Detroit, Mich. Surital Sodium is that company's trade name for sodium 5-allyl-5-(1-methyl-butyl)-2-thiobarbituric acid.

[1]See notes on page 28.

Method of Administration

Most veterinarians prefer to use 4 per cent solution of surital for dogs and cats; others use 2.5 per cent solution. When used intravenously as 4 per cent solution, the dosage is approximately 1 cc. per 5 lbs. of body weight. This is prepared by adding 25 cc. sterile physiological saline to the 1 Gm. vial.

As with other barbituric acid derivatives, larger or older animals as well as those in poor physical condition require less surital to produce anesthesia. Younger animals may require more anesthetic.

Surital is given by three principal methods: alone, following premedication with morphine and atropine, or concurrently with d-tubocurarine chloride. The latter two of these methods are described below.

Young and Eads[10] reported on the use of surital sodium following administration of ¼ gr. of morphine and 1/150 gr. of atropine. Surital was given 20 to 30 minutes after administration of morphine and atropine. Longer anesthesia was produced and the operator was able to administer the surital intravenously unassisted. When premedication with morphine was used, it was necessary to administer only approximately 0.5 cc. of 4 per cent solution for each pound of body weight. Similar results were obtained by Reutner and Gruhzit,[1] who administered methadon, 10 mg. for a 25-lb. dog, given subcutaneously one-half hour prior to injection of surital.

To obtain as much muscular relaxation as possible, Brinker[11] added curare to the diluted surital. To 1 Gm. of surital sodium he added 22.7 cc. sterile physiological saline and 2.3 cc. of d-tubocurarine chloride. This dilution was chosen so that the amount injected would correspond with the recommended average dose of both surital and curare.[1,11] The concurrent intravenous administration of surital and curare provides maximum muscular relaxation for fracture reduction. Because the placental barrier is effective against curare,[12] and because it permits the use of smaller amounts of the anesthetic, combination of these two drugs is being used rather widely in performing cesarean sections.

Clinical Observations

Since release of surital sodium for investigational purposes, several thousand dogs and cats have received this anesthetic. Numerous publications reporting on use of this ultrashort-acting anesthectic in 1,268 dogs and cats have appeared in the literature,[1-16] while an even larger group of investigators (56), reporting on its use in 6,254 animals, made only case histories of their findings.

Because of its low toxicity, surital can be used in dogs and cats of any age. Animals up to 18 years of age and suffering from pyometra have been operated upon successfully using surital as the sole anesthetic. With surgical procedures of longer duration than 20 minutes, syringe and needle may be taped in place on the leg so that additional amounts of the anesthetic may be given as indicated.

Surital has been used as a general anesthetic for such procedures as ovariectomies, removal of neoplasms, extraction of teeth, roentgenography, tissue biopsy, readjustment of splints, application of casts and other fracture fixation, removal of vocal cords, treatment and suturing of wounds, removal of nictitating membranes, cleaning teeth, relaxation of abdomen for deep palpation, removal of dew claws, castration, removal of foreign bodies, reduction of luxations, operative repair of hernias, amputation of tail, entropions, lancing of abscesses, ocular surgery, ear trimming, tonsillectomy, pyometra, urethrotomy, dressing of painful skin conditions and caesarean sections.

In performing three cesarean sections, Brinker[11] gave just enough surital and curare initially to accomplish relaxation, followed by small amounts while the operation was in progress, as indicated. The relaxation of the bitch was considered ideal. Seventeen puppies were removed from the three bitches, and all were alive except one which had been dead for several days. His observations indicated that minimum effect was produced on the puppies by surital-curare combination and that little difficulty was encountered in stimulating the puppy to breathe after removal from the uterus.

The solution should be injected slowly (usually 3 to 5 minutes) until the desired degree of anesthesia is obtained.

Surgical anesthesia usually persists for a period varying from 10 to 30 minutes depending upon depth of anesthesia. Recovery from the anesthetic is usually complete in approximately one and one-half hours.

Summary

Clinical data are presented covering 7,522 dogs and cats following use of surital sodium administered either alone, following premedication with morphine and atropine, or concurrently with d-tubocurarine chloride.

Results of clinical use of surital thus far indicate that anesthesia is of short duration; that induction and post-operative excitement are practically nil; that a relatively high margin of safety prevails if the agent is given slowly to effect, and that a minimum amount of circulatory and respiratory depression is produced.

Surgical anesthesia usually persists for a period varying from 10 to 30 minutes, depending upon the depth of anesthesia. Recovery from the anesthetic is usually complete in approximately one and one-half hours.

(Continued on page 28)

SECRETARY'S REPORT

I am herewith giving you a condensed report of the secretary's activities from June, 1952 to June, 1953.

In the September - October, 1952, issue of THE CALIFORNIA VETERINARIAN I made an exhaustive survey covering the following matters: Legislative, insurance, annual AVMA matters, local associations, meetings attended, press releases, publicity and public relations, report of our two conventions, matters of the Board of Examiners Veterinary Medicine, equitable compensation for governmental veterinarians, Women's Auxiliary and office work.

In the May-June issue you will find a report on the Legislative Committee about what happened in Sacramento. After a very strenuous campaign the committee accomplished all that could be expected with strong opposition presented here and there. The Committee on Equitable Compensation for Governmental Veterinarians should be highly congratulated on the very fine work they did in getting the salary increases. This I know has been very gratifying to all those involved and just shows what can be accomplished by the association when it goes after what it wants.

The year ending June 30, 1953, has been most satisfactory in all respects. Financially it tops all previous years. Membership is now over 825 with the enrollment of the senior class of 1953, Davis.

The mid-winter conference and the annual meeting were successful from many standpoints—good management, splendid programs, good attendance and financially successful.

THE CALIFORNIA VETERINARIAN has enjoyed its best year. From a 32-page book the convention issue of 1953 is 44 pages with 27 advertisers. The coming year 1953-54 will be a banner one for our publication.

I am very gratified to tell you that the response from exhibitors for space at the June meeting broke all records.

Through the efforts of my office on public relations we have had better cooperation from outside groups than ever before.

Our relationship with the AVMA has been closer than previous years and from what Dr. Van Houweling writes they seem much pleased with our help on the bill before Congress pertaining to First Lieutenants and the $100 bonus, the Research Fund, speakers' bureau, radio matters, AVMA membership, resident secretary and reappointment of the AVMA executive board districts.

Office correspondence was heavier this year than usual on account of it being legislative year.

Toronto Meeting AVMA

The 90th annual convention of the AVMA held in Toronto, Canada, July 20-23, 1953, established an all-time attendance record of 3501. The splendid facilities of the Royal York Hotel together with excellent television demonstrations and the high quality scientific presentations repaid the efforts put forth by the committee and made the meeting a success and enjoyable to everyone. Dr. W. L. Boyd's presidential address was outstanding and Brigadier General James A. McCallam was installed president for the coming year. Dr. A. H. Quin of Kansas City, Missouri, was unanimously elected president elect.

Award Winners

The International Veterinary Congress prize was awarded to Dr. L. Van Es of Lincoln, Nebraska. The AVMA award went to Dr. George W. Gillie of Fort Wayne, Indiana. The 1953 Borden Award and medal were presented to Dr. George H. Hart, Dean of the School of Veterinary Medicine, Davis, California. The Humane Act award winner was 14-year-old Martin Nicholson, Lynn Valley, British Columbia, Canada.

Brucellosis Meeting

The Committee on Brucellosis termed brucellosis as the most costly cattle disease and recommended legislation, educational campaign and elimination of reactors as control features. Dr. H. C. Cameron, School of Veterinary Medicine, Davis, represented the CSVMA at the meeting.

Conference Meetings

A joint conference of constituent association secretaries, editors of veterinary medical publications, and members of constituent associations, public relations and ethic committees met on Sunday, July 19th, on "Our Total Public Relations Responsibility." Dr. J. L. Wells of Kansas City acted as chairman. The subject of public relations was thoroughly discussed. Following luncheon the four groups held separate meetings.

Editor's Meeting

Mr. J. L. Ruebel, editor of the Fort Dodge Bio Chemic Review, arranged the editors' program, inviting your secretary to present a paper on "Remember Your Responsibility." Dr. Ruebel acted as chairman of the meeting. Represented were veterinary journals, state association publications, college publications and house organs. In all, about twenty attended. From the talks and papers presented considerable interesting information and dif-

(Continued on page 32)

Report of Delegate to House of Representatives American Veterinary Medical Association

Toronto, Ontario, Canada, July 20-23, 1953

The House of Representatives of the American Veterinary Medical Association convened on July 18, 1953, in the Royal York Hotel, Toronto, Ontario, Canada.

Doctor Hubert C. Clark, Director of the Gorgas Institute, Canal Zone, and Doctor Peter F. Bahnsen, Georgia, were made honorary members of the American Veterinary Medical Association. Doctor Clark's research determined that cattle are a reservoir of equine trypanosomiasis. He also did outstanding work on piroplasmosis of cattle. Doctor Bahnsen is a past president of the United States Livestock Sanitary Association. He has done outstanding work on tick eradication in Georgia and was honored by resolution by the Georgia House of Representatives.

The American Veterinary Medical Association and Michigan State College are producing thirteen record interviews for radio and thirteen kinescopes, of 14½ minutes' duration, for television to be used for public relations.

A new American Veterinary Medical Association directory will be printed in 1954.

The American Veterinary Medical Association's Washington, D. C., representative (General McCallam) has done liaison work on the United States Bureau of Animal Industry salary survey, held conferences with the Surgeon General of the Army, Selective Service, Civil Service Commission, and Department of Labor. He has attended hearings on the Doctors' Draft Law, the $100 per month bonus for veterinarians in armed service, and the business and professional voluntary pension plan.

The Executive Secretary, Doctor J. G. Hardenbergh, reported there were 533 new members after deduction of losses. Membership at the present time is 12,476.

Doctor Hardenbergh reported that 57 per cent of the AVMA income was derived from the membership and 43 per cent from other sources. Also, that the net worth of the association is $109,041.48. The association has worked on a balanced budget for the last year.

The AVMA convention will be held in Seattle, Washington, in 1954, Minneapolis, Minnesota, in 1955, and San Antonio, Texas, in 1956. An invitation from Cleveland, Ohio, was presented for the 1957 convention.

Resolutions

A resolution recommending uniform state regulations on brucellosis was defeated on the grounds that it was outside the jurisdiction of the AVMA.

A resolution supporting laws and regulations requiring the cooking of garbage was passed.

A resolution to make initial appointments of veterinarians as first lieutenants in the armed forces was passed.

A resolution relative to maintaining and strengthening Veterinary Corps food inspection was passed.

Proposed Amendments to the AVMA Constitution and By-Laws

1. Make changes in the Constitution and By-Laws for the operation of student chapters.
2. Treasurer to be appointed by the Board of Governors, subject to confirmation by the Executive Committee.
3. Provide for representative of the United States Air Force Veterinary Corps in the House of Representatives.
4. Rename the Executive Committee of the House of Representatives.
5. Members dropped from constituent associations will not be dropped from the AVMA unless membership reciprocity has been adopted between the two associations.
6. Further clarify membership requirements.
7. Provide for president-elect to serve as acting president in event of vacancy.
8. Provide for the election of one vice-president from each zone and one vice-president from the membership at large.

The Executive Committee of the House of Representatives made the following recommendations:

1. Issue membership certificates as well as membership cards to members. This was not recommended by the House of Representatives because of expense to the association.
2. Appoint a nominating committee to nominate officers of the association and conduct election by mailed ballot. This was referred back to the Executive Committee for more detail on procedure.
3. Make members of the House of Representatives eligible for election to the Executive Committee of the House of Representatives regardless of length of time yet to be served. In the past it was held that only members who had three or more years to serve in the House of Representatives were eligible.
4. Change the name of the "Executive Committee" of the House of Representatives to "Advisory Committee' of the House of Representatives.
5. Re-elect Doctor C. W. Bower of Kansas to the National Board of Veterinary Examiners.
6. That the House of Representatives give a vote of confidence on the report of the Council on Education.

C. E. Wicktor, D.V.M.,
Delegate, State of California

OPPORTUNITIES

For Lease

Small animal hospital, fully equipped, in Southern California's fastest growing area. Established over 20 years. Great opportunity for capable veterinarian. Write Box A-1, care of THE CALIFORNIA VETERINARIAN.

* * *

For Sale

Mixed practice, irrigated desert area, Southern California. Price includes equipped hospital with two bedroom furnished home connected. Young practice, bright future of continual growth and expansion. Write Box A-3, care of THE CALIFORNIA VETERINARIAN.

* * *

Almost new small animal hospital, 1700 square feet, completely equipped, apartment, 35 kennels, outdoor runs, zoned in beautiful booming town in San Diego county, Calif. Practice established eight years. $10,000 down. Good terms. Write Box A-5, care of THE CALIFORNIA VETERINARIAN.

* * *

Excellent small animal practice in Southern California. 50 cages, 18 outside runs, X-ray, equipment and drugs. No real estate. Good lease. Priced at less than one year's gross. Write or call Dr. John H. Chapman, 1013 N. Sycamore Ave., Hollywood 38.

* * *

Mixed Practice for Sale

Practice primarily dairy in San Joaquin Valley. Hospital and all equipment including 2-way radio. Gross $35,000 year. Price $25,000. Terms can be arranged. Write Box A-4, THE CALIFORNIA VETERINARIAN.

* * *

Clinic for Breeding Control

Humane organization seeks licensed veterinarian interested in establishing Spaying Clinic at their Pet Shelter and Boarding Kennels in Montebello, nine miles east of downtown Los Angeles. Interesting offer for right party. Write: Good Shepherd Foundation, Inc., 3118 East Fourth Street, Los Angeles 63; or phone ANgelus 1-2566.

Wanted

Desire to purchase or lease with option to buy established small animal practice in California. Will be discharged from Veterinary Corps next January. Graduate of accredited school, have a family, have had several years' experience and am licensed in California. Write Box A-2, care of THE CALIFORNIA VETERINARIAN.

Veterinarian with California license for small animal practice in modern hospital in Los Angeles suburb. Excellent working conditions, salary and percentage. Capable practitioner can net in excess of $10,000 annually. Inquiry confidential. Write Dr. C. H. Ozanian, 10326 E. Artesia, Bellflower.

* * *

Notice—Local Associations

At the meeting of the local associations at Long Beach it was emphasized that the state association prefers to operate as the recipient of policies as presented by the local associations. Suggestions should come through a representative member of each local acting as a liaison man.

Anesthesia in Dogs and Cats

(Continued from page 25)

Using 4 per cent solution, the approximate dosage of surital when administered intravenously to dogs and cats is 1 cc. per 5 pounds of body weight, depending on age and condition of the patient.

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Distemper Vaccine Immunization

(Continued from page 23)

5-cc. injections at two week intervals, starting at four months of age) to fit the existing situation confronting the veterinarian. The two-week interval between injections seemed to be a reasonable period to re-stimulate these animals. In general, approximately 1 cc. per 5 lbs. body weight was used.

The diet of these animals consisted of a mixture of canned dog food, canned horse meat, milk, and commercial dog food meal. Each pup received approximately 2 gms. of Vitamycin* per day, in its food. This ration resulted in an excellent state of nutrition as can be noted in Figures 2 and 4. Ectoparasites were controlled when necessary, by dipping in Tritox,* a lindane-pyrethrum solution. Internal parasitism was controlled by the routine use of Vermiplex.*

Summary

A controlled study involving the use of a modified vaccine immunization program to protect puppies exposed to the distemper complex is presented. Twelve of 14 vaccinates survived; whereas, all 10 of the litter-mate controls succumbed. Five of the twelve puppies that succumbed showed inclusion bodies of only infectious hepatitis; whereas, inclusion bodies of both infectious hepatitis and distemper were observed in tissues from two of the pups. Two controls died showing symptoms of convulsions; whereas, the two vaccinate litter-mates remained normal throughout. Evidence of inclusion bodies were lacking in five of the animals that died. All vaccinates survived re-exposure and inoculation of virus of Carré, 9-11 months after the first exposure.

*Trademark, Pitman-Moore Company, Indianapolis, Indiana.

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Disc Protrusions in the Dog

(Continued from page 21)

However, such cases should be watched carefully for regression.

4. Diffuse or multiple lesions—many protruding discs

5. Most cervical protrusions.

Surgery may be considered in above cases that don't respond or in:

1. Recurrent attacks which are getting progressively worse.

2. A characteristic paraplegia—loss of bowel or urine functions in recent occurrences. A profound paraplegia of longer duration than ten-days has a poor surgical prognosis.

It is concluded that surgical methods are indicated in select cases and that such procedures are practical for the veterinary clinician.

Secretary's Report

(Continued from page 26)

ferent ideas were discussed. The meeting was considered successful enough to be repeated next year.

Exhibits

The commercial exhibits were well arranged and most interesting. Some sixty-two leading companies occupied booth space. Fifteen well-designed educational exhibits were displayed. All of these were prepared by organizations or groups and attracted considerable attention. Third place winner, Radiology in Veterinary Medicine, was presented by Dr. George H. Hart, T. J. Hage and H. S. Cameron of the School of Veterinary Medicine, Davis.

The very successful meeting closed with the officers of both the Women's Auxiliary and the AVMA being installed.

Colonel Hartman Appointed New Chief Of Army Veterinary Corps

Colonel Jacob L. Hartman was appointed chief of the Veterinary Division, Surgeon General's Office, Department of the Army, effective February 1, 1953. He succeeds Brig. Gen. J. A. McCallam who was retired on January 31, 1953.

OFFICERS AND MEETING DATES OF LOCAL ASSOCIATIONS

NOTE: *Kindly notify our office of any changes or corrections.*

Bay Counties V. M. A.
President, Howard F. Carroll
Vice-President, Richard L. Stowe
Secretary, David Madsen, 44 South 4th St., San Jose
Meetings, second Tuesday of the month

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Meetings bi-monthly, fourth Wednesday

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Meetings, May, September, November, January

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Vice-President, Arthur J. Boero
Secretary-Treasurer, Robert Harris, P. O. Box 381, Turlock
Meetings, fourth Wednesday of the month

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President, J. O. Stiner
Vice-President, R. N. Donnelly
Secretary, H. A. Snelbaker, P. O. Box 1252, Oroville
Meetings, second Tuesday of the month

Orange Belt V. M. A.
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Vice-President, H. H. Laskey
Secretary-Treasurer, R. E. Hoadley, Box 26, Coachella
Meetings, second Monday of the month

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Meetings, second Tuesday of even month

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Meetings, third Monday of the month

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Meetings, third Thursday of the month

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Meetings, second Wednesday of the month

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Meetings, Thursday evening every 6th week

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Meetings, third Wednesday of the month

Radio Program KNBC

Henry Schacht, Conductor of "Farmer's Digest," will interview Dr. N. H. Casselberry in a series of broadcasts.

First, Monday, October 12th. Subject, leptospirosis, a disease of cattle and swine.

Second, Monday, October 19th, blue tongue disease in sheep.

The broadcast will be heard from 6:15 to 6:45 a.m.

What's New?

Your Association wants items that will make news. Tell us about new methods; developments; discoveries; new hospitals established; personal items which might interest others. Have you addressed a gathering recently? Tell us about it. Have you received a community citation, or honor? Give us the facts—we'll convert them into newspaper language. Let's make the Veterinarian better known throughout California.

Address:

CHAS. S. TRAVERS, *Executive Secretary*
3004 16th Street, San Francisco 3, Calif.

Department of Agriculture Promotions

Dr. C. K. Shane has been placed in charge of the Bureau of Livestock Disease Control activities in the district comprising Inyo, Mono, Riverside, Imperial, San Diego, and San Bernardino Counties. Dr. H. G. Wixom, formerly in charge of this district, has been promoted to Assistant Chief, Bureau of Livestock Disease Control, filling the vacancy created as a result of the promotion of Dr. H. P. Bonnikson to Chief.

Check from Bay Counties

Since the last issue we have received a check from the Bay Counties Veterinary Medical Association to cover the expense of coffee and doughnuts served to members and exhibitors at Long Beach. Many thanks.

Baby Girl

Congratulations to Dr. and Mrs. Richard Ainley of Santa Maria on the birth of a daughter, Margaret Diane, on September 19, 1952.

Dr. Rosenberger Retires

Dr. Arthur C. Rosenberger, nationally recognized sheep expert, retired from the California Department of Agriculture after 40 years of outstanding service and was feted in Modesto on August 26th. On behalf of Dr. Rosenberger's friends, several hundred of whom were present, Dr. A. G. Boyd presented him with a check with which to buy a new car. Dr. Rosenberger was the only remaining member of the Department's animal disease control staff who had served throughout our 23 years' fight to control sheep scabies. He was also in charge of Merced district activities against foot-and-mouth disease in 1924.

Women's Auxiliary Membership

No invitation is necessary to become a member of the Women's Auxiliary to the CSVMA. We welcome all interested women. The dues are only $1.00 per year. Just write to: Mrs. J. C. O'Brien, Secretary - Treasurer, Sebastopol, California, P. O. Box 45.

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